

Listing of Claims:

Claims 1-44: Canceled without prejudice or disclaimer.

45. (Currently Amended) A semiconductor fabrication system, comprising:

a first semiconductor fabrication tool,

wherein the first semiconductor fabrication tool includes a first chamber configured to perform at least one process on a semiconductor wafer;

a software application, in communication with the first semiconductor fabrication tool, configured to determine first specified qualities of the first chamber in performing the at least one process,

wherein the first specified qualities are directed to at least one of: a processing time required to perform the at least one process, a rate of producing defective output products of the at least one process, a uniformity of output products of the at least one process, and or a capability index of the at least one process of the first chamber; and

a second chamber configured to perform at least one process on a semiconductor wafer,

wherein the software application is further configured to determine second specified qualities of the second chamber in performing the at least one process,

wherein the second specified qualities are directed to at least one of: a processing time required to perform the at least one process of the second chamber, a rate of producing defective output products of the at least one process of the second chamber, a uniformity of output

products of the at least one process of the second chamber, and or a capability index of the at least one process of the second chamber, and

wherein the software application is further configured to receive a request from an external application to qualify the first and second chambers for a first requested process and make accessible information relating to the first and second specified qualities of the first and second chambers.

46. (Original) The system of claim 45, wherein the software application is further configured to receive a request to perform a first requested process and select one or more of the first and second chambers to perform the first requested process based on specified preferences which form part of the request and on the information relating to the first and second specified qualities of the first and second chambers.

47. (Original) The system of claim 45, wherein the software application is further configured to generate detailed status information that includes information relating to the first specified qualities of the first chamber and relating to maintenance information of the first chamber.

48. (Original) The system of claim 47, wherein the software application is further configured to receive a request from an external application to access the detailed status information and configured to make available only a pre-defined portion of the detailed status information to be accessed by the external application.

49. (Currently Amended) A method of fabrication of semiconductors, comprising the steps of :

- (1) receiving data from a semiconductor fabrication tool directed to qualities of at least one process occurring within the semiconductor fabrication tool; and
- (2) determining first specified qualities of a first chamber of the semiconductor fabrication tool in performing the at least one process, wherein the first specified qualities are directed to at least one of: a processing time required to perform the at least one process, a rate of producing defective output products of the at least one process, a uniformity of output products of the at least one process, and or a capability index of the at least one process of the first chamber;
- (3) determining second specified qualities of a second chamber of the semiconductor fabrication tool in performing the at least one process, wherein the second specified qualities are directed to at least one of: a processing time required to perform the at least one process, a rate of producing defective output products of the at least one process, a uniformity of output products of the at least one process, and or a capability index of the at least one process of the second chamber; and
- (4) receiving a request from an external application to qualify the first and second chambers for a first requested process and make accessible information relating to the first and second specified qualities of the first and second chambers.

50. (Original) The method of claim 49, further comprising the step of:

receiving a request to perform a first requested process and selecting one or more of the first and second chambers to perform the first requested process based on specified preferences

which form part of the request and on the information relating to the first and second specified qualities of the first and second chambers.

51. (Original) The method of claim 49, further comprising the step of:

generating detailed status information that includes information relating to the first specified qualities of the first chamber and relating to maintenance information of the first chamber.

52. (Original) The method of claim 51, further comprising the step of:

receiving a request from an external application to access the detailed status information and making available only a pre-defined portion of the detailed status information to be accessed by the external application.